

***I MINA'TRENTAI UNU NA LIHESLATURAN GUÅHAN***  
**2011 (FIRST) Regular Session**

**Resolution No. 15-31 (COR)**

Introduced by:

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Adolpho B. Palacios, Sr.  
v. c. pangelinan  
Dennis G. Rodriguez, Jr.  
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Aline A.Yamashita, Ph.D.  
Judith T. Won Pat, Ed.D.

Relative to expressing the concerns of *I Liheslaturan Guåhan* relative to the proposal made by the Department of Defense (DoD) to drill additional fresh water wells into Guam's aquifer, and to request that DoD provide additional financial resources for water conservation and a comprehensive water management program; to encourage the use of green technology to make the best use of limited water resources; to prevent mining of Guam's aquifer for commercial purposes; and to declare that safe and clean drinking water and

sanitation are human rights essential to the full enjoyment of life.

1        **BE IT RESOLVED BY THE COMMITTEE ON RULES OF I**  
2        ***MINA'TRENTAI UNU NA LIHESLATURAN GUÅHAN:***

3        **WHEREAS,** the United States Department of Defense (DoD) is actively  
4        coordinating a massive military buildup in Guam that will include permanent  
5        facilities and infrastructure to support a new Marine base, expanded facilities  
6        for other branches of military service, and additional personnel and their  
7        families, as well as warfare training; and

8        **WHEREAS,** among the most important needs that must exist or be  
9        produced in Guam for the buildup is an adequate supply of fresh water, of  
10       which Guam has a plentiful, but not limitless amount; and

11       **WHEREAS,** numerous rivers and streams can be found in southern  
12       Guam, but the full potential of the island's surface water resources has not  
13       been adequately explored; however; the majority of the buildup will occur in  
14       northern Guam, where the island's unique aquifer, located under the northern  
15       third of the island, is the most important source of fresh water; and

16       **WHEREAS,** Guam's aquifer is divided into six (6) sub-basins separated  
17       by walls of volcanic rock, its underground water supply consisting of  
18       limestone soaked with fresh water, as well as residing on limestone soaked  
19       with seawater; and

1       **WHEREAS**, the location and depth of any new wells that may be in  
2 Department of Defense (DoD) plans are a great concern because wells must be  
3 drilled to an appropriate depth to tap into fresh water rather than seawater,  
4 and pumping too large a quantity of fresh water may cause seawater to rise  
5 upward into the zone of fresh water, causing irreparable harm to the aquifer;  
6 and

7       **WHEREAS**, the Guam Waterworks Authority (GWA) estimates that  
8 there is a need to drill sixteen (16) additional wells into Guam's aquifer to  
9 accommodate Guam's organic growth over the coming years; and

10       **WHEREAS**, the DoD has made clear their intent to drill twenty-two (22)  
11 new wells for an estimated additional thirteen (13) million gallons daily (mgd)  
12 to support the addition of nearly eighty thousand (80,000) additional people  
13 due to the buildup; and

14       **WHEREAS**, this added number of GWA and DoD wells will drive  
15 Guam's daily consumption to over sixty-five (65) mgd by the completion of  
16 the buildup; and

17       **WHEREAS**, the Draft Environmental Impact Statement (DEIS), Final  
18 Environmental Impact Statement (FEIS), and Record of Decision (ROD) all fail  
19 to adequately address the impacts to the public water supply, primarily  
20 because the impact will take place outside the military fence line; and

1       **WHEREAS**, as a result, drinking water infrastructure improvements are  
2 not included in the proposed project, even though the construction workforce  
3 is a necessary factor in implementing the buildup's projects; and

4       **WHEREAS**, this project-related population increase will create a  
5 projected shortfall of thirteen (13) mgd; will significantly affect the ability of  
6 GWA to provide a sufficient quantity of adequate quality drinking water for  
7 Guam's general population; and will create potentially serious and  
8 unacceptable public health implications that may fall disproportionately on  
9 low-income residents; and

10       **WHEREAS**, potable water shortages and contaminated water sources  
11 often result in the spread of waterborne diseases, such as diarrhea, cholera,  
12 typhoid and parasite infections, and are among the leading causes of illness  
13 and death worldwide; and

14       **WHEREAS**, an additional concern is the military's history of abusing  
15 Guam's land and water through the use of pesticides and herbicides during  
16 and after World War II, including the regular use of DDT, Agent White, Agent  
17 Purple, Agent Orange, Silvex, and 2,4-d, which were commonplace in the  
18 reconstruction of postwar Guam, many of these chemicals having made their  
19 way into the Guam aquifer; and

20       **WHEREAS**, in order to avoid the projected thirteen (13) mgd shortfall,  
21 DoD has proposed a mitigation of three (3) mgd within the DoD water system  
22 to assist GWA with its water needs in northern Guam, provided the necessary

1 piping is installed by GWA or a contractor; however, among many other  
2 mitigation obstacles, this mitigation proposal:

- 3 a. lacks interconnection points;
- 4 b. does not address the fact that DoD's water mains require  
5 replacement; and
- 6 c. does not take into account droughts which would reduce the  
7 capacity of DoD water production; and

8 **WHEREAS**, DoD must cooperate with GovGuam to be directly  
9 responsible for ensuring a sufficient water supply is available to Guam during  
10 the construction phase, and must provide financial resources and technical  
11 support to address the significant water shortage, the inadequate drinking  
12 water infrastructure for contractor and civilian population growth due to the  
13 military expansion, and to upgrade Guam's secondary sewer treatment  
14 facilities; and

15 **WHEREAS**, DoD must immediately commit to this action to meet the  
16 water demands of the increased number of people that will soon be arriving  
17 in support of the military buildup, as well as Guam's projected organic  
18 growth; and

19 **WHEREAS**, Guam's infrastructure needs include new wells and water  
20 system facilities, including water lines, booster pumps, storage tanks, and  
21 primary and secondary treatment facilities, and the DoD support must  
22 identify, plan, design, and implement necessary capital improvement projects

1 to address the water shortfall and provide financial and technical assistance  
2 for the siting, design, construction, operation, and maintenance of Guam's  
3 water supply and distribution system; and

4       **WHEREAS**, DoD must provide clear, documented commitments to  
5 provide specific quantities of DoD water to address construction-related  
6 shortfalls in supply, as well as providing financial, engineering, and technical  
7 assistance to GWA for implementing effective water conservation programs,  
8 such as leak detection, water line replacement, and development and  
9 implementation of an effective water efficiency and conservation program;  
10 and

11       **WHEREAS**, in order to implement long-term water management in  
12 Guam, workgroups must be formed in cooperation with GovGuam to develop  
13 a long-term drinking water management system to assess, maintain, upgrade,  
14 and conserve Guam's northern aquifer, and GWA and DoD must integrate all  
15 new water systems, including surface water systems in southern Guam, to  
16 protect, and avoid unnecessarily taxing, the northern aquifer; and

17       **WHEREAS**, water conservation guidelines and ordinances must be  
18 developed and implemented for all military bases and incorporated into  
19 contract language for construction worker housing, to include retrofitting  
20 toilets, urinals, faucets, and showerheads with appropriate water conservation  
21 devices including the replacement of older toilets and urinals; and

1       **WHEREAS**, all new homes, the new base for the Marines, barracks for  
2 construction workers, and all supporting infrastructure for the military  
3 buildup must include WaterSense certified toilets, faucets, and showerheads,  
4 and all homes under military jurisdiction must be equipped with ENERGY  
5 STAR certified clothes washers; and

6       **WHEREAS**, landscaping must include native vegetation only and avoid  
7 lawns requiring artificial water sprinkler irrigation, with all landscaping site  
8 design retaining ninety-five percent (95%) of rainfall through swales; and

9       **WHEREAS**, water meters installed on all buildings must have tiered  
10 rates to discourage excessive water use, help detect water leaks, and  
11 encourage water conservation, and both DoD and GovGuam must provide  
12 outreach that supplies tips for water conservation in homes and provides free  
13 in-home water audits and leak detection; and

14       **WHEREAS**, all structures must have leak detection equipment installed  
15 or conduct annual detection surveys on all existing military water systems,  
16 and the Main Cantonment must include the installation of leak detection  
17 equipment during new water system construction, dual plumbing for non-  
18 potable water use, and rainwater catchments and gray water systems to  
19 reduce water demand and wastewater flow to all treatment facilities; and

20       **WHEREAS**, Guam's northern aquifer, as well as surface water in the  
21 south, is vital to the quality of life of every individual in Guam: from farming  
22 needs to cleaning homes, for sanitary purposes, as well as for the drinking

1 needs of all living creatures, and DoD and GovGuam must work  
2 cooperatively to prevent and discourage any attempts at misuse of Guam's  
3 aquifer and surface water systems, including mining for commercial  
4 purposes; and

5       **WHEREAS**, Guam Public Law 20-06:7 states: "All surface water and  
6 ground water in Guam are declared to be a public asset and to belong to all of  
7 the people of Guam held in trust by the Government of Guam," thus all  
8 efforts relative to Guam's fresh water supply, and to both civilian and DoD  
9 needs, must be under the umbrella of an Integrated Water and Wastewater  
10 System; and

11       **WHEREAS**, clean, readily available water for everyone in Guam is a  
12 human right that cannot and must not be infringed upon or exploited due to  
13 mismanagement or for commercial purposes; now, therefore, be it

14       **RESOLVED**, that *I Liheslaturan Guåhan* recognizes the critical and  
15 constant need for ensuring sanitary and safe drinking water for all of the  
16 people of Guam, and that the buildup will bring added pressures on limited  
17 water and wastewater resources, making it necessary that the Department of  
18 Defense work with GovGuam to avoid exploitation and contamination of  
19 Guam's northern aquifer and all other water resources, to eliminate current  
20 contamination, prevent future contamination, implement conservation  
21 programs, and create sustainable solutions for wastewater treatment and  
22 management; and be it further



1       **RESOLVED**, that the Department of Defense must cooperate with  
2 GovGuam to be directly responsible for ensuring a sufficient water supply is  
3 available to Guam during the construction phase, and the Department of  
4 Defense must provide financial resources and technical support to address the  
5 significant water shortage, the inadequate drinking water infrastructure for  
6 contractor and civilian population growth due to the military expansion, and  
7 to upgrade Guam's secondary sewer treatment facilities, and commit to action  
8 to meet the water demands of the increased number of people that will soon  
9 be arriving in support of the military buildup as well as Guam's projected  
10 organic growth; and be it further

11       **RESOLVED**, that Guam's infrastructure needs include new wells and  
12 water system facilities, including water lines, booster pumps, storage tanks,  
13 and primary and secondary treatment facilities, and the DoD support must  
14 identify, plan, design, and implement necessary capital improvement projects  
15 to address the water shortfall, including development and expansion of  
16 surface water resources in southern Guam, and provide financial and  
17 technical assistance for the siting, design, construction, operation, and  
18 maintenance of Guam's water supply and distribution system; and be it  
19 further

20       **RESOLVED**, that DoD must commit to providing specific quantities of  
21 DoD water to address construction-related shortfalls in supply, as well as  
22 providing financial, engineering, and technical assistance to GWA for

1 implementing effective water conservation programs, such as leak detection,  
2 water line replacement, and the development and implementation of an  
3 effective water efficiency and conservation program; and be it further



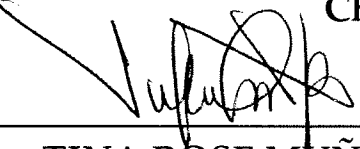
4 **RESOLVED**, that workgroups must be formed in cooperation with  
5 GovGuam to develop a long-term drinking water management system to  
6 assess, maintain, upgrade, expand if necessary, integrate and conserve all of  
7 Guam's water systems, including surface water systems, to protect, and avoid  
8 unnecessarily taxing, the northern aquifer; and be it further

9 **RESOLVED**, that water conservation guidelines and ordinances must  
10 be developed and implemented for all military bases and incorporated into  
11 contract language for construction worker housing, to include retrofitting and  
12 replacing existing equipment with that which conserves water; and be it  
13 further

14 **RESOLVED**, that DoD and GovGuam must work cooperatively to  
15 prevent and discourage any attempts at misuse of Guam's aquifer and surface  
16 water systems, including mining for commercial purposes; both civilian and  
17 DoD water needs must be under the umbrella of an Integrated Water and  
18 Wastewater System; and that clean, readily available water for everyone in  
19 Guam is a human right that cannot and must not be infringed upon or  
20 exploited due to mismanagement or for commercial purposes; and be it  
21 further

1       **RESOLVED**, that the Speaker and the Chairperson of the Committee on  
2 Rules certify, and the Legislative Secretary attest to, the adoption hereof, and  
3 that copies of the same be thereafter transmitted to President Steve Robinson,  
4 First Vice President Gene Schmidt, Second Vice President Earl Garber, and  
5 Secretary/Treasurer Jack Majeres of the National Association of Conservation  
6 Districts; to the Honorable Ken Salazar, Secretary of the United States  
7 Department of the Interior; to the Honorable Tony Babauta, Assistant  
8 Secretary of the Interior for Insular Areas, United States Department of the  
9 Interior; to Dr. Robert Underwood, President, University of Guam; to Dr. Lee  
10 Yudin, Dean of the College of Natural and Applied Sciences, University of  
11 Guam; to Roland J. Quitugua, President, and Oscar G. Flores, Vice-President,  
12 Guam Association of Conservation Districts; to the Guam Association of  
13 Conservation Districts; and to the Honorable Edward J.B. Calvo, *I Maga'laha*  
14 *Guåhan*.

**DULY AND REGULARLY ADOPTED BY THE COMMITTEE ON RULES  
OF *I MINA'TRENTAI UNU NA LIHESLATURAN GUÅHAN* ON THE 26<sup>TH</sup>  
DAY OF JANUARY, 2011.**

 _____ <b>JUDITH T. WON PAT, Ed. D</b> Speaker	 _____ <b>RORY J. RESPICIO</b> Chairperson, Committee on Rules
 _____ <b>TINA ROSE MUÑA BARNES</b> Legislative Secretary	